

82. (Amended) A platelet-free tissue sealant or adhesive comprising a protein solution and a surfactant preparation.

84. (Amended) The tissue sealant or adhesive according to claim 82 wherein the protein is selected from the group consisting of albumin, collagen, gelatin, globulin, elastin, protamine, and histone.

85. (Amended) The tissue sealant or adhesive according to claim 84 wherein the concentration of the protein is between about 3% (w/w) and about 55% (w/w).

86. (Amended) The tissue sealant or adhesive according to claim 82 wherein the protein comprises albumin.

168. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises an ionic surfactant.

169. (New) The tissue sealant or adhesive according to claim 168 wherein the ionic surfactant is selected from the group consisting of alkanoic acids, alkylsulfonic acids, alkyl amines, perfluoroalkanoic acids, and perfluorosulfonic acids.

170. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises sodium lauryl sulfate.

171. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises perfluorooctanoic acid.

172. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises octanoic acid.

173. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises dodecanoic acid.

174. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises palmitic acid.

175. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises perfluorosuberic acid.

176. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises a non-ionic surfactant.

177. (New) The tissue sealant or adhesive according to claim 176 wherein the non-ionic surfactant is selected from the group consisting of alkyl aryl polyether alcohols, alkyl-

polyoxyethylene ethers, perfluoroalkyl-polyoxyethylene ethers, polyoxyethylene esters, and polyoxyethylene sorbitan.

178. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises tyloxapol.

179. (New) The tissue sealant or adhesive according to claim 82 wherein the surfactant comprises a fluorosurfactant.

180. (New) The tissue sealant or adhesive according to claim 82 further comprising a lipid preparation.

181. (New) The tissue sealant or adhesive according to claim 82 further comprising at least one component selected from the group consisting of a viscosity modifier, a hydrophobicity modifier, a cross-linking modifier, an elasticity modifier, a tissue wetting modifier, a solubility modifier, a sterilization stabilizer, an anti-inflammatory agent, and an antibiotic.

182. (New) The tissue sealant or adhesive according to claim 181 wherein the component is selected from the group consisting of buffers, polymers, denaturants, cross-linkers, hydrophilic agents, hydrophobic agents, cationic agents, and anionic agents.

183. (New) The tissue sealant or adhesive according to claim 182 wherein the polymer is selected from the group consisting of polysaccharides, proteins, and synthetic polymers.

184. (New) The tissue sealant or adhesive according to claim 82 wherein the protein is chemically derivatized.

185. (New) The tissue sealant or adhesive according to claim 184 wherein the protein is chemically derivatized by the addition of at least one chemical moiety selected from the group consisting of straight-chain hydrocarbons, branched hydrocarbons, substituted hydrocarbons, fluorocarbons, polyethers, polyesters, and aromatic groups.

186. (New) The tissue sealant or adhesive according to claim 185 wherein the chemical moiety further comprises at least one functional group selected from the group consisting of an alcohol, a ketone, a halide, an acyl-halide, an anhydride, a carboxylic acid, a sulfonic acid, a sulfonyl halide, an epoxide, a cyano group, an ester, and an amine.

187. (New) The tissue sealant or adhesive according to claim 82 further comprising a protein cross-linker.

188. (New) The tissue sealant or adhesive according to claim 187 wherein the crosslinker comprises a carbodiimide.

189. (New) The tissue sealant or adhesive according to claim 188 wherein the carbodiimide comprises 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride.
190. (New) The tissue sealant or adhesive according to claim 82 wherein the protein is partially cross-linked.
191. (New) A platelet-free tissue sealant or adhesive comprising a protein solution and a lipid preparation.
192. (New) The tissue sealant or adhesive according to claim 191 wherein the protein is selected from the group consisting of albumin, collagen, gelatin, globulin, elastin, protamine, and histone.
193. (New) The tissue sealant or adhesive according to claim 191 wherein the lipid comprises a naturally-occurring lipid.
194. (New) The tissue sealant or adhesive according to claim 191 wherein the lipid comprises a synthetic lipid.
195. (New) The tissue sealant or adhesive according to claim 191 wherein the lipid comprises a synthetic variant of a naturally-occurring lipid.
196. (New) The tissue sealant or adhesive according to claim 191 wherein the lipid is selected from the group consisting of phosphoglycerides, sphingomyelin, glycolipids, and sterols.
197. (New) The tissue sealant or adhesive according to claim 191 wherein the lipid is selected from the group consisting of phosphatidyl cholines, phosphatidyl serines, phosphatidyl ethanolamines, phosphatidyl inositols, phosphoglycerides, alkyl glucopyranosides, long chain fatty alcohols, bile acids, dipalmitoylphosphatidic acid, dilaurylphosphatidic acid, and diphosphatidyl glycerol.
198. (New) The tissue sealant or adhesive according to claim 191 wherein the lipid comprises a hydrophobically substituted glycerophosphocholine of the structure  $R_1-C(O)-O-CH_2-(R_2-C(O)-O)CH_2-CH_2-OPO_2(CH_2)_2-N(CH_3)_3$ , wherein  $R_1$  and  $R_2$  are each independently saturated or unsaturated alkyl groups ranging in size from 4 to 22 carbons.
199. (New) The tissue sealant or adhesive according to claim 191 further comprising a surfactant preparation.
200. (New) The tissue sealant or adhesive according to claim 199 wherein the surfactant comprises an ionic surfactant.

201. (New) The tissue sealant or adhesive according to claim 199 wherein the surfactant comprises a non-ionic surfactant.

202. (New) The tissue sealant or adhesive according to claim 191 further comprising at least one component selected from the group consisting of a viscosity modifier, a hydrophobicity modifier, a cross-linking modifier, an elasticity modifier, a tissue wetting modifier, a solubility modifier, a sterilization stabilizer, an anti-inflammatory agent, and an antibiotic.

203. (New) The tissue sealant or adhesive according to claim 202 wherein the component is selected from the group consisting of buffers, polymers, denaturants, cross-linkers, hydrophilic agents, hydrophobic agents, cationic agents, and anionic agents.

204. (New) The tissue sealant or adhesive according to claim 203 wherein the polymer is selected from the group consisting of polysaccharides, proteins, and synthetic polymers.

205. (New) The tissue sealant or adhesive according to claim 191 wherein the protein is chemically derivatized.

206. (New) The tissue sealant or adhesive according to claim 205 wherein the protein is chemically derivatized by the addition of at least one chemical moiety selected from the group consisting of straight-chain hydrocarbons, branched hydrocarbons, substituted hydrocarbons, fluorocarbons, polyethers, polyesters, and aromatic groups.

207. (New) The tissue sealant or adhesive according to claim 206 wherein the chemical moiety further comprises at least one functional group selected from the group consisting of an alcohol, a ketone, a halide, an acyl-halide, an anhydride, a carboxylic acid, a sulfonic acid, a sulfonyl halide, an epoxide, a cyano group, an ester, and an amine.

208. (New) The tissue sealant or adhesive according to claim 191 further comprising a protein cross-linker.

209. (New) The tissue sealant or adhesive according to claim 208 wherein the crosslinker comprises a carbodiimide.

210. (New) The tissue sealant or adhesive according to claim 209 wherein the carbodiimide comprises 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride.

211. (New) The tissue sealant or adhesive according to claim 191 wherein the protein is partially cross-linked.